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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-----------------------|---------------------|------------------|
| 09/592,907  | 06/13/2000  | David William Balsdon | 051481-5050         | 5487             |
| 9629  | 7590        | 12/29/2004            | EXAMINER            |                  |
| MORGAN LEWIS & BOCKIUS LLP<br>1111 PENNSYLVANIA AVENUE NW<br>WASHINGTON, DC 20004 |             |                       | FOX, JOHN C         |                  |
|   |             |                       | ART UNIT            | PAPER NUMBER     |
|   |             |                       | 3753                |                  |
| DATE MAILED: 12/29/2004   |             |                       |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/592,907 | <b>Applicant(s)</b><br>BALSDON, DAVID WILLIAM |  |
|                              | <b>Examiner</b><br>John Fox          | <b>Art Unit</b><br>3753                       |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-16 and 21-26 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-16 and 21-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

This action is responsive to the communication filed November 23, 2004.

It is noted for the record that the Office Action of August 23, 2004 was a non-final action.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7-16 and 21-26 are rejected under 35 U.S.C. 103 as being unpatentable over Rosas et al in view of Kadner and further in view of Koch and Watson.

Rosas et al show the claimed valve having a molded cap portion 14 "snapped" to the valve portion 12. The connector 70/72 is read as being releasable in view of the well known nature of such connectors in wiring harnesses in engines. It is inherent that cap 14 is adapted to be snapped to an intake manifold. It is also inherent that the cap can be fitted to the valve with the connector 70/72 at any orientation. One definition of contiguous in the World Book Dictionary, 1978 edition, is "very close together; near; neighboring". Since the overmolded cap of Rosas et al is near the wire and bobbin, and encapsulates them both, the Rosas et al valve fairly responds to the new claim language.

Rosas et al do not show a second, reduced diameter portion of the valve head received in and "occluding" the aperture. Kadner shows a reciprocating valve with a second portion of reduced cross section occluding the aperture and including an O-ring to seal, which is reliable and long lasting. It would have been obvious for one of ordinary skill in the art to have used such a valve head and seal construction as taught by

Kadner in the Rosas et al valve to improve the reliability and length of service of the valve thereof.

Rosas et al do not show the pin and pin calibration feature. Koch shows a solenoid valve with pin and pin calibration feature as claimed, *i. e.* two chambers, one housing the coil and valve and another housing the pin calibration means. It would have been obvious for one of ordinary skill in the art to have used such a pin and pin calibration feature as taught by Koch in the valve of Rosas et al to similarly provide for adjustment of the spring biasing force on the valve. It would further be obvious to dispose the biasing spring in the second chamber as shown by Koch to allow for the biasing adjustment.

Watson is applied as a teaching reference. Watson shows a solenoid valve with an overmolded cap forming two chambers, one housing the coil and another an adjustment mechanism similar to the spring adjustment of Koch. It is believed that the references fairly suggest the claimed invention.

Applicant's remarks have been fully considered but are not deemed to be persuasive. The amendment of May 27, 2004 included no significant changes to the claims or persuasive arguments, and the Office Action of August 23, 2004 will be treated as a proper action.

Applicant argues that the references do not suggest two cavities separated from each other. This is not persuasive because the claims do not call out such a feature, but merely recite first and second cavities. Any axially extending housing can be read as

comprising two cavities, and the claims do not preclude part of one cavity from extending within and/or overlapping the other cavity.

Applicant argues that the references do not teach a pin extending between the flanges of the bobbin. However, the claim language is of such scope that the pin (armature 62) of Rosas et al fairly meets it in that the preposition "between" does not require the pin to extend the whole length between the flanges.

Lastly, applicant's argument that the proposed changes to Rosas et al would render it inoperable are speculation without any factual basis. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Erickson et al is cited to show the level of skill in the art. Erickson et al show a particularly shaped pole piece and a bias adjustment mechanism.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fox whose telephone number is 571-272-4912. The examiner can normally be reached on Increased Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on 571-272-4930. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
John Fox  
Primary Examiner  
Art Unit 3753